Historic, archived document

Do not assume content reflects current scientific knowledge, policies, or practices.

A99.9
F7622U+

C3

United States
Department of
Agriculture

Forest Service

**Northeastern Forest
Experiment Station**

Resource Bulletin NE-111

Pulpwood Production in the Northeast--1987

Richard H. Widmann

USDA
NAT'L AGRIC LIBRARY
2000 JUL 28 11:44
CURRENT SERIAL RECORDS
ACQ/SERIALS BRANCH

Abstract

The 1987 annual assessment of pulpwood production and receipt for the 14 states in the Northeast Region shows that total pulpwood production was up 5 percent since 1986. Total production in 1987 was 9,387,700 cords. The two components that make up total production, roundwood and manufacturing residue chips, both increased. Roundwood production rose 3 percent to 6,796,700 cords and residue chips rose 10 percent to 2,591,000 cords. Harvesting intensity was highest in Maine, where an average of 17 cubic feet of roundwood was harvested per acre of timberland.

The Author

RICHARD H. WIDMANN, Forester, Forest Inventory and Analysis Unit, Northeastern Forest Experiment Station, USDA Forest Service, Broomall, Pennsylvania.

Manuscript received for publication 7 April, 1989

Pulpwood Production in the Northeast--1987

Contents

Introduction....................................1
Total Production................................1
Roundwood.......................................1
Residue Chips...................................3
Shipments Into and Out of Region...............3
Consumption.....................................3
Harvesting Intensity............................3
Appendix..4
    Definition of Terms.........................4
    Metric Equivalents..........................4
    Conversion Factors..........................4
    Index to Tables.............................5

Northeastern Forest Experiment Station
Broomall, PA 19008

June 1989

Introduction

This annual report is based on a canvass of all pulpmills in the Northeast that use wood as a basic raw material to make pulp for the production of paper, insulation board, and hardboard products. Shipments outside the Northeast Region are traced by exchanging information with neighboring forest experiment stations that conduct similar canvasses, and by canvassing pulpmills in adjacent Canadian provinces.

The statistics for production are based on mill receipts of roundwood and manufacturing plant residues.[1] These receipts are subject to year-to-year fluctuations in wood inventory. Mill receipts of pulpwood from roundwood are reported by county where harvested. However, pulpwood from plant residues cannot be traced beyond the state where the residues were produced. Some of the logs from which the residues came probably were harvested in states other than the one in which they were processed.

Total Production

Total production of pulpwood in the 14 Northeastern States reached its highest level ever in 1987--9,387,700 cords, a 5-percent increase over 1986. This represents approximately 10 percent of pulpwood production in the United States. Over the last 20 years production has increased by 57 percent (Fig. 1). Roundwood makes up 72 percent and manufacturing residues, 28 percent. Both of these components of total production are at record highs: roundwood production increased by 3 percent to 6,796,700 cords and production from residue chips increased by 10 percent to 2,591,000 cords. These high levels of production were in response to paper mills running at near full capacity during most of the year.

Percent Change In Total Production Compared To 1986

	Percent		Percent
Connecticut	-12	New Jersey	-27
Delaware	-12	New York	+ 5
Kentucky	+44	Ohio	+ 1
Maine	+ 4	Pennsylvania	- 8
Maryland	- 6	Rhode Island	- 5
Massachusetts	-33	Vermont	+10
New Hampshire	+9	West Virginia	+25

Maine was the largest producer of pulpwood, producing 46 percent of the Northeast total. After two years of declining production, Maine pulpwood rebounded with a 4-percent or 152,800-cord increase. Production in Kentucky was 546,700 cords, up 44 percent or 166,100 cords. This topped the previous high set in 1983 by 24,000 cords.

Other states with large increases were West Virginia, up 111,000 cords or 25 percent; New Hampshire, up 48,600 or 9 percent; New York, up 45,700 cords or 5 percent; and Vermont, up 37,600 cords or 10 percent. States with significant declines were Pennsylvania, down 8 percent, and Maryland, down 6 percent--99,100 and 20,400 cords, respectively. The decrease in Maryland was due to decreases in the use of manufacturing residues.

Roundwood

Both softwood and hardwood roundwood production increased. Softwood roundwood production rose 5 percent and hardwood roundwood production increased by 1 percent. After two years of decreasing production, spruce and fir have begun to increase. Production of roundwood from spruce and fir species accounted for more than half the softwood increase, which was up 82,900 cords in 1987. The remainder of the

---

[1] Definitions of terms used in this report are in the Appendix. Note that whole-tree chips are included as roundwood.

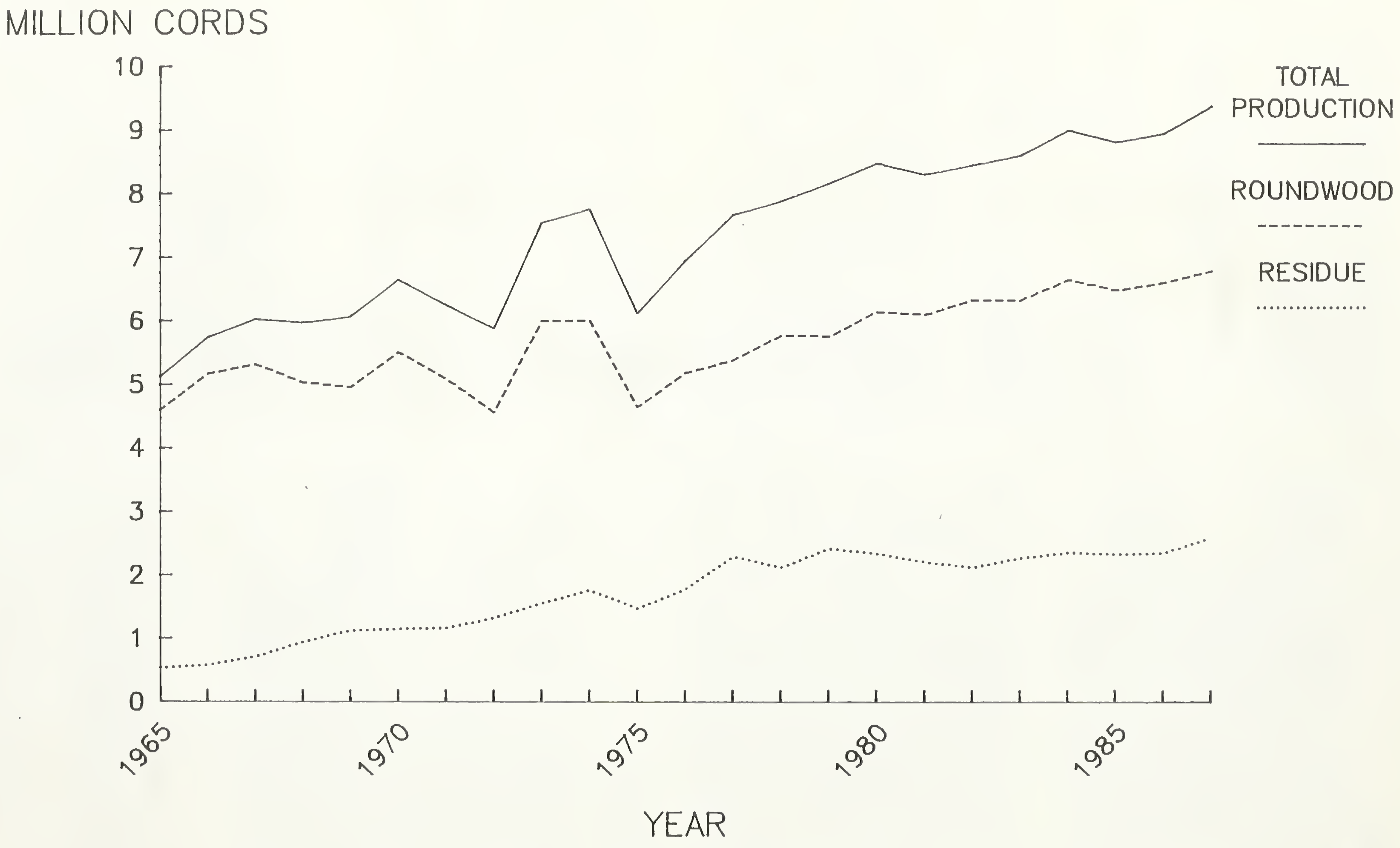

Figure 1.--Total roundwood, and manufacturing residue production in the Northeast.

softwood increase resulted from increases in the hemlock and tamarack group. In recent years, the harvest from this group has grown steadily and is now 645,300 cords, twice what it was 10 years ago. Although the production from hardwoods changed very little, the production of pulpwood from the aspen/yellow-poplar group increased significantly. In the last 10 years, aspen/yellow-poplar production has doubled to 457,600 cords.

Most of the increase in spruce and fir roundwood in 1987 was in Maine. Here, spruce and fir increased by 99,400 cords or 7 percent. Spruce and fir also increased in New Hampshire (+5,700 cords) but decreased in New York (-13,100) and Vermont (-8,800 cords).

The majority of hemlock and tamarack pulpwood harvested came from the northern states of Maine, New York, Vermont and New Hampshire. In Maine, hemlock and tamarack production increased by 21,200 cords or 7 percent.

Residue Chips

The production of pulpwood chips from manufacturing residues rose in most of the Northeastern States. These chips were generated from slabs and edgings at sawmills and from byproducts at other wood using plants. The present record levels at which these chips are being produced reflect the high lumber production at Northeast mills and high demand for these chips at pulpmills. Production of softwood chips increased by 82,200 cords and hardwood chips increased by 158,800 cords.

Shipments Into and Out of Region

Total shipments of wood out of the region were 564,000 cords and shipments into the region were 1,070,900 cords. In 1987, the amount of pulpwood exported out of the region increased by 88,400 cords and the amount of wood imported into the region increased by 162,400 cords. The majority of the wood shipped into the region was consumed in Kentucky, while most of the wood exported out of the region was produced in West Virginia.

Consumption

Total consumption of pulpwood at mills in the region was 9,894,400 cords, up 509,100 cords (5 percent). The consumption of softwoods rose by 216,400 cords and the consumption of hardwoods by 292,700 cords. Residue chips represented 58 percent of the increase and roundwood the remaining 42 percent.

Harvesting Intensity

An indication of the harvesting intensity in a state is the average pulpwood removals per acre of timberland. Maine has the highest pulpwood harvest per acre of timberland in the Northeast with an average of 17 cubic feet of roundwood harvested per acre. New Hampshire and Vermont also are comparatively high, each with approximately 7 cubic feet harvested per acre compared with Pennsylvania's 4 cubic feet and Kentucky's 2 cubic feet.

Pulpwood Removals Per Acre of Timberland

State	Harvest Cubic feet/acre
Connecticut	0.06
Delaware	3.11
Kentucky	1.75
Maine	17.38
Maryland	6.30
Massachusetts	0.29
New Hampshire	7.02
New Jersey	0.04
New York	4.26
Ohio	4.58
Pennsylvania	3.71
Rhode Island	0.00
Vermont	6.72
West Virginia	2.01
Average	5.91

The average net annual growth on timberland in the Northeast is roughly 38 cubic feet of growing-stock volume per acre. Using this average the portion of growth being used for pulpwood roundwood ranges from 46 percent in Maine to zero in Rhode Island. On average across the entire Northeast, 15.5 percent of the growth is harvested for pulp. These averages are broad measures of the growth and pulpwood removals in Northeast. The actual data for a specific area within a state may vary considerably.

Appendix

Definition of Terms

Cord. See Standard cord.

Cord equivalent. A unit of measure that is applied to forms of wood other than roundwood, such as chips, slabs, edgings, and other manufacturing residues and equal to 85 cubic feet of solid wood or 1 cord.

Hardwoods. Dicotyledonous trees, usually broad-leaved and deciduous.

Manufacturing plant residues. Wood materials, such as sawmill slabs and edgings, sawdust, veneer clippings and cores, post and pole trimming, and pulp screening generated from the manufacture of roundwood products.

Pulpwood. Roundwood, whole-tree chips, or manufacturing plant residues that are used for the production of woodpulp.

Pulpwood production. Roundwood and manufacturing plant residues used to make up woodpulp. These are either harvested or generated in the state or region.

Pulpwood receipts. Pulpwood received at woodpulp mills. These can originate from outside the state or region.

Pulpwood imports. Pulpwood receipts originating from outside the Northeast (14-state region).

Roundwood products. Logs, bolts, total-tree chips, mine timbers, fenceposts, poles, and similar timber products generated by harvesting trees for industrial or consumer use.

Softwoods. Coniferous trees, usually evergreen with needles or scalelike leaves.

Standard cord. A unit of measure for stacked bolts of wood, encompassing 128 cubic feet of wood, bark, and air space. In the Northeast, the measure refers to a stack of wood containing 85 cubic feet, or 2.41 cubic meters, of solid wood. A standard cord commonly is referred to as a cord, as in this report. This is not the same as a face cord, commonly used in firewood marketing.

Timber products output. Production total from timber harvest and plant byproducts.

Whole-tree chips. Unbarked wood chips generated from the aboveground portion of a tree, including bolewood, limbs, and leaves.

Metric Equivalents

One standard cord = 85 cubic feet (solid wood) = 2.41 cubic meters (solid wood)

One cubic foot = 28,317 cubic centimeters = 0.028 cubic meter

Conversion Factors Used for Green Roundwood

1 ton spruce-fir = 0.5556 cord
1 ton hemlock-tamarack = 0.5000 cord
1 ton pine (New England, New York, and Canada) = 0.5263 cord
1 ton aspen--yellow-poplar = 0.5263 cord
1 ton oak-hickory = 0.3571 cord
1 ton other hardwoods = 0.3846 cord

Index to Tables

Table No. Page

1. Total production of pulpwood in the Northeast, by state and source, 1987 6

2. Production and receipts of pulpwood in the Northeast, by state and softwood and hardwood, 1987 6

3. Pulpwood production from roundwood in the Northeast, by state, softwood and hardwood, and destination of shipment, 1987 7

4. Pulpwood chip production from manufacturing residues in the Northeast, by state, softwood and hardwood, and destination of shipment, 1987 8

5. Pulpwood receipts from roundwood in the Northeast, by state, softwood and hardwood, and origin of shipment, 1987 9

6. Pulpwood chip receipts from manufacturing residues in the Northeast, by state, softwood and hardwood, and origin of shipment, 1987 9

7. Pulpwood production from roundwood received from states outside the Northeast, by state (or province) of origin and softwood and hardwood, 1987 10

8. Pulpwood chip receipts from wood-using manufacturing plants outside the Northeast, by state (or province) of origin and softwood and hardwood, 1987 10

9. Pulpwood production from roundwood in the Northeast, by state and species group, 1987 11

10. Pulpwood production from roundwood in Kentucky and Ohio, by county and species group, 1987 12

Table No. Page

11. Pulpwood production from roundwood in southern New England, by state, county, and species group, 1987 14

12. Pulpwood production from roundwood in northern New England, by state, county, and species group, 1987 15

13. Pulpwood production from roundwood in New York, by county and species group, 1987 17

14. Pulpwood production from roundwood in Pennsylvania, by county and species group, 1987 19

15. Pulpwood production from roundwood in Delaware, Maryland, and New Jersey, by county and species group, 1987 21

16. Pulpwood production from roundwood in West Virginia, by county and species group, 1987 22

17. Bark generated from roundwood pulpwood in the Northeast, by state and species group, 1987 23

18. Pulpwood removals per acre of timberland in the Northeast, 1987 .. 24

Table 1.-Total production of pulpwood in the Northeast, by state and source, 1987

(In thousands of standard cords)[a]

State	From roundwood	From manufacturing residues	From all sources
Connecticut	1.3	2.5	3.8
Delaware	14.2	1.0	15.2
Kentucky	245.2	301.5	546.7
Maine	3,487.5	806.6	4,294.1
Maryland	179.8	149.5	329.3
Massachusetts	10.0	13.9	23.9
New Hampshire	397.3	189.2	586.5
New Jersey	.8	.3	1.1
New York	771.4	142.1	913.5
Ohio	372.6	198.2	570.8
Pennsylvania	694.8	415.5	1,110.3
Rhode Island	-	3.5	3.5
Vermont	349.8	80.8	430.6
West Virginia	272.0	286.4	558.4
Total	6,796.7	2,591.0	9,387.7

[a] Rough wood basis, equivalent to 85 ft^3 solid wood.

Table 2.-Production and receipts of pulpwood in the Northeast, by state and softwood and hardwood, 1987

(In thousands of standard cords)

State	Produced in state		Received in state		Net export(+) import(-)
	Softwood	Hardwood	Softwood	Hardwood	
Connecticut	1.1	2.7	-	-	+3.8
Delaware	13.8	1.4	-	-	+15.2
Kentucky	37.8	508.9	145.1	836.5	-434.9
Maine	2,887.6	1,406.5	3,165.0	1,679.0	-549.9
Maryland	202.0	127.3	(D)	(D)	-173.8
Massachusetts	18.5	5.4	-	-	+23.9
New Hampshire	316.3	270.2	140.7	380.5	+65.3
New Jersey	.8	.3	-	-	+1.1
New York	411.7	501.8	539.1	411.5	-37.1
Ohio	46.6	524.2	62.0	679.0	-170.2
Pennsylvania	76.6	1,033.7	213.4	1,125.1	-228.2
Rhode Island	.4	3.1	-	-	+3.5
Vermont	219.7	210.9	(D)	(D)	+416.2
West Virginia	105.0	453.4	-	-	+558.4
Total	4,337.9	5,049.8	4,472.5	5,421.9	-506.7

(D) Data withheld to avoid disclosure for individual mills.

Table 3.-Pulpwood production from roundwood in the Northeast, by state, softwood and hardwood, and destination of shipment, 1987

(In thousands of standard cords)

State	Softwood				Hardwood				All species
	Retained in state	Shipped to other states		Total	Retained in state	Shipped to other states		Total	
		In Northeast	Outside Northeast			In Northeast	Outside Northeast		
Connecticut	-	0.4	-	0.4	-	0.9	-	0.9	1.3
Delaware	-	12.4	1.4	13.8	-	.4	-	.4	14.2
Kentucky	6.4	4.8	23.5	34.7	155.6	54.4	0.5	210.5	245.2
Maine	2,059.3	10.5	71.9	2,141.7	1,316.0	29.6	.2	1,345.8	3,487.5
Maryland	29.3	38.1	34.4	101.8	66.4	11.6	-	78.0	179.8
Massachusetts	-	8.4	-	8.4	-	1.6	-	1.6	10.0
New Hampshire	42.6	113.4	-	156.0	174.4	66.9	-	241.3	397.3
New Jersey	-	.8	-	.8	-	-	-	-	.8
New York	366.6	.9	-	367.5	316.6	24.2	63.1	403.9	771.4
Ohio	40.2	3.3	-	43.5	311.5	17.6	-	329.1	372.6
Pennsylvania	43.8	18.8	-	62.6	591.0	41.2		632.2	694.8
Rhode Island	-	-	-	-	-	-	-	-	-
Vermont	13.1	148.7	-	161.8	1.3	186.7	-	188.0	349.8
West Virginia	-	64.0	5.4	69.4	-	105.2	97.4	202.6	272.0
Total	2,601.3	424.5	136.6	3,162.4	2,932.8	540.3	161.2	3,634.3	6,796.7

Table 4.-Pulpwood chip production from manufacturing residues in the Northeast, by state, softwood and hardwood, and destination of shipment, 1987[a]

(In thousands of standard-cord equivalents)

State	Softwood				Hardwood				All species
	Produced and retained in state	Shipped to other states		Total	Produced and retained in state	Shipped to other states		Total	
		In Northeast	Outside Northeast			In Northeast	Outside Northeast		
Connecticut	-	0.7	-	0.7	-	1.8	-	1.8	2.5
Delaware	-	-	-	-	-	1.0	-	1.0	1.0
Kentucky	0.7	1.9	0.5	3.1	230.8	61.2	6.4	298.4	301.5
Maine	705.3	-	40.6	745.9	58.1	2.6	-	60.7	806.6
Maryland	19.8	50.2	30.2	100.2	9.7	39.6	-	49.3	149.5
Massachusetts	-	10.1	-	10.1	-	3.8	-	3.8	13.9
New Hampshire	59.8	100.5	-	160.3	12.5	16.4	-	28.9	189.2
New Jersey	-	-	-	-	-	.3	-	.3	.3
New York	44.0	.2	-	44.2	41.8	54.0	2.1	97.9	142.1
Ohio	3.1	-	-	3.1	182.3	12.8	-	195.1	198.2
Pennsylvania	11.5	2.5	-	14.0	357.7	43.8	-	401.5	415.5
Rhode Island	-	.4	-	.4	-	3.1	-	3.1	3.5
Vermont	-	57.9	-	57.9	-	22.9	-	22.9	80.8
West Virginia	-	1.3	34.3	35.6	-	98.7	152.1	250.8	286.4
Total	844.2	225.7	105.6	1,175.5	892.9	362.0	160.6	1,415.5	2,591.0

[a] Includes sawmill slabs and edgings, sawdust, veneer cores, and post and piling trimmings.

Table 5.-Pulpwood receipts from roundwood in the Northeast, by state, softwood and hardwood, and origin of shipment, 1987

(In thousands of standard cords)

State[a]	Softwood				Hardwood				All species
	Cut in state	Received from other states			Cut in state	Received from other states			
		In Northeast	Outside Northeast	Total		In Northeast	Outside Northeast	Total	
Kentucky	6.4	-	85.4	91.8	155.6	-	214.8	370.4	462.2
Maine	2,059.3	150.6	69.0	2,278.9	1,316.0	79.4	195.7	1,591.1	3,870.0
Maryland	29.3	(D)	(D)	(D)	66.4	(D)	(D)	(D)	(D)
New Hampshire	42.6	24.9	-	67.5	174.4	190.7	-	365.1	432.6
New Jersey	-	-	-	-	-	-	-	-	-
New York	366.6	106.2	2.4	475.2	316.6	32.1	.1	348.8	824.0
Ohio	40.2	14.2	-	54.4	311.5	81.0	-	392.5	446.9
Pennsylvania	43.8	52.0	52.6	148.4	591.0	43.0	10.3	644.3	792.7
Vermont	13.1	(D)	(D)	(D)	1.3	(D)	(D)	(D)	(D)
Total	2,601.3	424.5	247.9	3,273.7	2,932.8	540.3	434.8	3,907.9	7,181.6

[a] States with no pulpmills are omitted.

(D)Data withheld to avoid disclosure for individual mills.

Table 6.-Pulpwood chip receipts from manufacturing residues in the Northeast, by state, softwood and hardwood, and origin of shipment, 1987[a]

(In thousands of standard cord equivalents)

State[b]	Softwood				Hardwood				All species
	Produced in state	Received from other states			Produced in state	Received from other states			
		In Northeast	Outside Northeast	Total		In Northeast	Outside Northeast	Total	
Kentucky	0.7	-	52.6	53.3	230.8	0.2	235.1	466.1	519.4
Maine	705.3	136.5	44.3	886.1	58.1	28.2	1.6	87.9	974.0
Maryland	19.8	(D)	(D)	(D)	9.7	(D)	(D)	(D)	(D)
New Hampshire	59.8	13.4	-	73.2	12.5	2.9	-	15.4	88.6
New Jersey	-	-	-	-	-	-	-	-	-
New York	44.0	19.9	-	63.9	41.8	20.9	-	62.7	126.6
Ohio	3.1	4.6	-	7.7	182.3	101.8	2.4	286.5	294.2
Pennsylvania	11.5	50.2	3.3	65.0	357.7	109.0	14.2	480.9	545.9
Vermont	-	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Total	844.2	225.7	129.0	1,198.9	892.9	362.0	259.2	1,514.1	2,713.0

[a] Includes sawmill slabs and edgings, sawdust, veneer cores, and post and pole trimmings.

[b] States with no pulpmills are omitted.

(D)Data withheld to avoid disclosure of data from individual mills.

Table 7.-Pulpwood production from roundwood received from states outside the Northeast, by state (or province) of origin and softwood and hardwood, 1987

(In thousands of standard cords)

Receiving state[a]	State or province of origin	Softwood	Hardwood	All species
Kentucky..............	Arkansas	0.6	3.1	3.7
	Illinois	10.6	30.7	41.3
	Indiana	-	11.5	11.5
	Mississippi	40.1	45.4	85.5
	Missouri	-	14.5	14.5
	Tennessee	34.1	109.6	143.7
Maine..................	New Brunswick	30.6	181.8	212.4
	Quebec	38.4	13.9	52.3
Maryland...............	Virginia	38.5	13.9	52.4
New York...............	Ontario	.3	-	.3
	Quebec	2.1	.1	2.2
Pennsylvania...........		52.6	10.3	62.9
All States		247.9	434.8	682.7

[a] States with no extraregional receipts are omitted.

Table 8.-Pulpwood chip receipts from wood-using manufacturing plants outside the Northeast, by state (or province) of origin and softwood and hardwood, 1987[a]

(In thousands of standard cord equivalents)

Receiving state[b]	State or province of origin	Softwood	Hardwood	All species
Kentucky..............	Arkansas	-	8.7	8.7
	Illinois	-	11.6	11.6
	Indiana	-	66.6	66.6
	Mississippi	48.7	27.8	76.5
	Missouri	3.9	62.5	66.4
	Tennessee	-	57.9	57.9
Maine..................	New Brunswick	1.0	*	1.0
	Quebec	43.3	1.6	44.9
Maryland...............	Virginia	28.8	5.9	34.7
Ohio...................	Indiana	-	2.4	2.4
Pennsylvania...........	Virginia	3.3	14.3	17.6
All states		129.0	259.3	388.3

[a] Includes sawmill slabs and edgings, sawdust, veneer cores, and post and piling trimmings.
[b] States with no extraregional receipts are omitted.
*Less than 50 cords.

Table 9.-Pulpwood production from roundwood in the Northeast, by state and species group, 1987

(In thousands of standard cords)

State	Softwood				Hardwood				All species
	Spruce and fir	Hemlock and tamarack	Pine	Total	Aspen and yellow-poplar	Oak and hickory	Other hardwood	Total	
Connecticut	-	0.4	*	0.4	-	-	0.9	0.9	1.3
Delaware	-	-	13.8	13.8	-	0.3	.1	.4	14.2
Kentucky	-	-	34.7	34.7	39.5	134.2	36.8	210.5	245.2
Maine	1,583.3	338.2	220.2	2,141.7	270.7	-	1,075.1	1,345.8	3,487.5
Maryland	-	1.9	99.9	101.8	4.2	36.3	37.5	78.0	179.8
Massachusetts	1.3	2.9	4.2	8.4	*	-	1.6	1.6	10.0
New Hampshire	72.8	49.5	33.7	156.0	3.5	-	237.8	241.3	397.3
New Jersey	-	-	.8	.8	-	-	-	-	.8
New York	98.6	194.6	74.3	367.5	44.0	7.9	352.0	403.9	771.4
Ohio	-	.2	43.3	43.5	47.2	197.5	84.4	329.1	372.6
Pennsylvania	-	2.8	59.8	62.6	22.6	183.4	426.2	632.2	694.8
Rhode Island	-	-	-	-	-	-	-	-	-
Vermont	94.7	48.6	18.5	161.8	2.8	-	185.2	188.0	349.8
West Virginia	.6	6.2	62.6	69.4	23.1	95.0	84.5	202.6	272.0
Total	1,851.3	645.3	665.8	3,162.4	457.6	654.6	2,522.1	3,634.3	6,796.7

*Less than 50 cords.

Table 10.-Pulpwood production from roundwood in Kentucky and Ohio, by county and species group, 1987

(In thousands of standard cords)

County[a]	Softwood				Hardwood				All species
	Spruce and fir	Hemlock and tamarack	Pine	Total	Aspen and yellow-poplar	Oak and hickory	Other hardwood	Total	
					KENTUCKY				
Ballard	-	-	0.7	0.7	2.1	2.2	0.9	5.2	5.9
Butler	-	-	-	-	-	10.0	-	10.0	10.0
Caldwell	-	-	.5	.5	-	2.1	.8	2.9	3.4
Calloway	-	-	.8	.8	.6	2.2	2.2	5.0	5.8
Carlisle	-	-	.1	.1	10.3	1.9	1.9	14.1	14.2
Casey	-	-	-	-	-	2.2	-	2.2	2.2
Crittenden	-	-	1.0	1.0	*	1.3	1.5	2.8	3.8
Fleming	-	-	1.5	1.5	2.1	5.4	1.7	9.2	10.7
Graves	-	-	2.2	2.2	.8	11.2	3.3	15.3	17.5
Greenup	-	-	2.2	2.2	8.1	21.0	4.4	33.5	35.7
Hardin	-	-	-	-	-	-	.5	.5	.5
Hickman	-	-	-	-	2.6	1.3	1.4	5.3	5.3
Hopkins	-	-	-	-	-	.1	-	.1	.1
Laurel	-	-	6.1	6.1	-	18.5	-	18.5	24.6
Lewis	-	-	1.1	1.1	1.6	7.6	2.5	11.7	12.8
Livingston	-	-	.2	.2	3.4	1.7	2.8	7.9	8.1
Lyon	-	-	.9	.9	1.9	5.2	5.1	12.2	13.1
McCracken	-	-	-	-	-	1.3	2.0	3.3	3.3
McCreary	-	-	6.2	6.2	-	-	-	.0	6.2
Marshall	-	-	-	-	4.6	1.7	2.6	8.9	8.9
Ohio	-	-	-	-	-	35.0	-	35.0	35.0
Trigg	-	-	-	-	1.4	2.3	3.2	7.4	7.4
Whitley	-	-	11.2	11.2	-	-	-	-	11.2
Total	-	-	34.7	34.7	39.5	134.2	36.8	210.5	245.2

Table 10.-(Cont'd.)-Pulpwood production from roundwood in Kentucky and Ohio, by county and species group, 1987

(In thousands of standard cords)

County[a]	Softwood				Hardwood				All species
	Spruce and fir	Hemlock and tamarack	Pine	Total	Aspen and yellow-poplar	Oak and hickory	Other hardwood	Total	
					OHIO				
Adams	-	-	-	-	0.8	2.0	0.7	3.5	3.5
Ashtabula	-	-	-	-	-	*	1.4	1.4	1.4
Athens	-	-	-	-	.7	6.6	3.2	10.5	10.5
Belmont	-	-	-	-	-	.8	.5	1.3	1.3
Carroll	-	-	4.1	4.1	-	4.3	2.3	6.6	10.7
Columbiana	-	-	-	-	-	.2	4.5	4.7	4.7
Coshocton	-	-	-	-	-	19.8	10.6	30.4	30.4
Cuyahoga	-	-	-	-	-	1.6	.9	2.5	2.5
Gallia	-	-	4.1	4.1	-	-	-	-	4.1
Geauga	-	-	-	-	-	*	.3	.3	.3
Guernsey	-	-	-	-	-	6.8	3.6	10.4	10.4
Harrison	-	-	-	-	-	5.9	3.2	9.1	9.1
Hocking	-	-	1.8	1.8	1.1	3.6	1.2	5.9	7.7
Holmes	-	-	-	-	-	2.9	1.5	4.4	4.4
Jackson	-	-	8.9	8.9	14.3	36.9	10.8	62.0	70.9
Knox	-	-	-	-	-	.4	.2	.6	.6
Lake	-	-	-	-	-	.5	.3	.8	.8
Lawrence	-	-	-	-	1.5	3.4	1.1	6.0	6.0
Licking	-	-	-	-	.1	.8	.3	1.2	1.2
Meigs	-	0.2	3.1	3.3	-	-	-	-	3.3
Muskingum	-	-	-	-	-	5.9	3.2	9.1	9.1
Noble	-	-	-	-	-	9.0	4.8	13.8	13.8
Perry	-	-	-	-	.1	.6	.3	1.0	1.0
Pike	-	-	4.4	4.4	5.6	14.6	4.7	24.9	29.3
Ross	-	-	1.7	1.7	2.5	6.6	2.2	11.3	13.0
Scioto	-	-	3.9	3.9	4.2	10.8	3.5	18.5	22.4
Stark	-	-	-	-	-	1.3	.6	1.9	1.9
Summit	-	-	-	-	-	.4	.2	.6	.6
Trumball	-	-	-	-	-	*	.3	.3	.3
Tuscarawas	-	-	-	-	-	10.3	5.6	15.9	15.9
Vinton	-	-	6.1	6.1	15.9	41.2	12.2	69.3	75.4
Washington	-	-	5.2	5.2	.4	-	-	.4	5.6
Total	-	.2	43.3	43.5	47.2	197.5	84.4	329.1	372.6

[a] Counties with no production are omitted.

*Less than 50 cords.

Table 11.-Pulpwood production from roundwood in southern New England, by state, county, and species group, 1987

(In thousands of standard cords)

County[a]	Softwood				Hardwood				
	Spruce and fir	Hemlock and tamarack	Pine	Total	Aspen and yellow-poplar	Oak and hickory	Other hardwood	Total	All species
					CONNECTICUT				
Hartford	-	-	-	-	-	-	0.4	0.4	0.4
Litchfield	-	0.4	*	0.4	-	-	-	-	.4
Windham	-	*	-	-	-	-	.5	.5	.5
Total	-	.4	*	.4	-	-	.9	.9	1.3
					MASSACHUSETTS				
Barnstable	-	-	0.1	0.1	-	-	*	*	0.1
Berkshire	1.3	1.2	.1	2.6	*	-	-	*	2.6
Bristol	-	-	-	-	-	-	0.2	0.2	.2
Essex	-	-	1.8	1.8	*	-	.1	.1	1.9
Franklin	-	.6	.1	.7	-	-	-	-	.7
Hampden	-	.2	-	.2	-	-	-	-	.2
Hampshire	-	.8	-	.8	-	-	-	-	.8
Middlesex	-	-	1.8	1.8	-	-	.3	.3	2.1
Norfolk	-	*	-	-	-	-	*	-	*
Plymouth	-	-	-	-	-	-	1.0	1.0	1.0
Worcester	-	.1	.3	.4	-	-	*	*	.4
Total	1.3	2.9	4.2	8.4	*	-	1.6	1.6	10.0

[a] Counties with no production are omitted.

*Less than 50 cords.

Table 12.-Pulpwood production from roundwood in northern New England, by state, county, and species group, 1987

(In thousands of standard cords)

County[a]	Softwood				Hardwood				All species
	Spruce and fir	Hemlock and tamarack	Pine	Total	Aspen and yellow-poplar	Oak and hickory	Other hardwood	Total	
				MAINE					
Androscoggin	5.0	5.4	19.2	29.6	3.8	-	9.4	13.2	42.8
Aroostook	286.6	24.7	2.6	313.9	8.1	-	96.1	104.2	418.1
Cumberland	1.9	6.3	19.3	27.5	5.8	-	6.7	12.5	40.0
Franklin	83.0	17.7	15.0	115.7	26.3	-	125.9	152.2	267.9
Hancock	71.1	2.9	1.1	75.1	5.4	-	27.5	32.9	108.0
Kennebec	9.6	21.8	26.7	58.1	8.1	-	22.4	30.5	88.6
Knox	4.0	3.3	3.8	11.1	.7	-	1.7	2.4	13.5
Lincoln	8.6	6.0	10.7	25.3	.9	-	2.1	3.0	28.3
Oxford	51.4	35.6	22.3	109.3	42.9	-	140.7	183.6	292.9
Penobscot	187.4	96.2	26.0	309.6	28.6	-	130.7	159.3	468.9
Piscataquis	302.8	29.2	7.7	339.7	27.6	-	120.0	147.6	487.3
Sagadahoc	.3	1.8	4.4	6.5	.5	-	.5	1.0	7.5
Somerset	426.6	48.7	25.2	500.5	69.3	-	165.1	234.4	734.9
Waldo	38.9	10.3	8.0	57.2	8.5	-	12.6	21.1	78.3
Washington	105.9	22.2	2.9	131.0	28.0	-	210.0	238.0	369.0
York	.2	6.1	25.3	31.6	6.2	-	3.7	9.9	41.5
Total	1,583.3	338.2	220.2	2,141.7	270.7	-	1,075.1	1,345.8	3,487.5

Table 12 (cont'd.)-Pulpwood production from roundwood in northern New England, by state, county, and species group, 1987

(In thousands of standard cords)

County[a]	Softwood				Hardwood				All species
	Spruce and fir	Hemlock and tamarack	Pine	Total	Aspen and yellow-poplar	Oak and hickory	Other hardwood	Total	
NEW HAMPSHIRE									
Belknap	0.2	0.7	2.7	3.6	-	-	2.6	2.6	6.2
Carroll	1.4	6.4	18.0	25.8	0.1	-	26.3	26.4	52.2
Cheshire	*	4.2	.1	4.3	-	-	*	*	4.3
Coos	66.3	27.8	1.1	95.2	3.4	-	193.3	196.7	291.9
Grafton	4.7	7.5	4.1	16.3	*	-	12.6	12.6	28.9
Hillsborough	*	.1	.1	.2	-	-	.2	.2	.4
Merrimack	-	1.1	.2	1.3	*	-	1.3	1.3	2.6
Rockingham	-	.7	3.2	3.9	*	-	.5	.5	4.4
Strafford	.2	.6	3.9	4.7	-	-	.9	.9	5.6
Sullivan	*	.4	.3	.7	-	-	.1	.1	.8
Total	72.8	49.5	33.7	156.0	3.5	-	237.8	241.3	397.3
VERMONT									
Addison	0.3	0.1	0.3	0.7	-	-	0.1	0.1	0.8
Bennington	.4	.2	1.0	1.6	0.3	-	4.1	4.4	6.0
Caledonia	20.6	5.4	2.1	28.1	*	-	34.6	34.6	62.7
Chittenden	1.0	.3	2.0	3.3	.2	-	.5	.7	4.0
Essex	36.5	10.6	.5	47.6	.6	-	135.9	136.5	184.1
Franklin	.4	4.0	2.0	6.4	1.3	-	.5	1.8	8.2
Grand Isle	-	-	-	-	-	-	*	*	*
Lamoille	3.7	2.1	.3	6.1	.1	-	.2	.3	6.4
Orange	3.5	7.3	1.2	12.0	-	-	.6	.6	12.6
Orleans	20.4	11.0	3.1	34.5	*	-	1.4	1.4	35.9
Rutland	2.3	2.0	4.0	8.3	.2	-	2.4	2.6	10.9
Washington	2.9	.7	.5	4.1	*	-	.3	.3	4.4
Windham	1.7	3.5	1.3	6.5	.1	-	1.2	1.3	7.8
Windsor	1.0	1.4	.2	2.6	*	-	3.4	3.4	6.0
Total	94.7	48.6	18.5	161.8	2.8	-	185.2	188.0	349.8

[a] Counties with no production are omitted.

*Less than 50 cords.

Table 13.-Pulpwood production from roundwood in New York, by county and species group, 1987

(In thousands of standard cords)

County[a]	Softwood				Hardwood				All species
	Spruce and fir	Hemlock and tamarack	Pine	Total	Aspen and yellow-poplar	Oak and hickory	Other hardwood	Total	
Albany	0.7	0.6	0.4	1.7	0.1	-	0.2	0.3	2.0
Alleghany	-	-	.4	.4	-	0.2	.4	.6	1.0
Broome	-	1.3	.3	1.6	.2	1.3	4.2	5.7	7.3
Cattaraugus	-	-	-	-	-	.3	6.6	6.9	6.9
Cayuga	.1	-	-	.1	-	-	-	-	.1
Chautauqua	-	-	-	-	-	-	4.7	4.7	4.7
Chemung	-	-	.4	.4	.3	.7	2.3	3.3	3.7
Chenango	5.8	5.1	-	10.9	.1	1.0	2.6	3.7	14.6
Clinton	5.4	3.2	6.7	15.3	3.9	-	20.9	24.8	40.1
Columbia	-	*	.3	.3	-	-	-	-	.3
Cortland	.4	.6	*	1.0	*	.3	.6	.9	1.9
Delaware	.8	1.3	.1	2.2	.1	1.6	.5	2.2	4.4
Dutchess	*	*	.1	.1	-	-	*	*	.1
Essex	1.0	23.4	15.6	40.0	3.6	-	65.9	69.5	109.5
Franklin	33.4	23.1	1.3	57.8	4.9	-	61.1	66.0	123.8
Fulton	.9	16.3	6.7	23.9	1.2	-	9.6	10.8	34.7
Greene	-	.3	*	.3	-	-	*	*	.3
Hamilton	14.8	15.4	1.1	31.3	1.0	-	62.7	63.7	95.0
Herkimer	8.4	3.8	.2	12.4	.1	-	3.7	3.8	16.2
Jefferson	.3	1.1	*	1.4	5.4	-	-	5.4	6.8
Lewis	7.3	11.6	2.2	21.1	9.1	-	22.6	31.7	52.8
Madison	.2	.3	*	.5	-	-	-	-	.5
Montgomery	2.2	.6	.5	3.3	*	-	.1	.1	3.4

Table 13.(cont'd.)-Pulpwood production from roundwood in New York, by county and species group, 1987

(In thousands of standard cords)

County[a]	Softwood				Hardwood				All species
	Spruce and fir	Hemlock and tamarack	Pine	Total	Aspen and yellow-poplar	Oak and hickory	Other hardwood	Total	
Oneida	4.0	9.4	0.9	14.3	1.3	-	2.7	4.0	18.3
Onondaga	.2	.2	-	.4	.1	-	-	.1	.5
Orange	-	*	-	*	-	-	-	-	*
Oswego	-	1.1	-	1.1	-	-	2.1	2.1	3.2
Otsego	1.3	7.8	.4	9.5	.1	0.5	1.3	1.9	11.4
Rensselaer	*	.8	.8	1.6	*	-	.2	.2	1.8
St. Lawrence	7.2	13.0	1.9	22.1	7.7	-	37.7	45.4	67.5
Saratoga	.2	18.5	12.0	30.7	1.3	-	16.3	17.6	48.3
Schenectady	-	.1	*	.1	*	-	.1	.1	.2
Schoharie	3.4	2.4	.5	6.3	.1	-	-	.1	6.4
Schuyler	.3	-	-	.3	.1	.4	.9	1.4	1.7
Sullivan	-	1.2	*	1.2	*	.2	.7	.9	2.1
Tioga	-	-	*	*	.5	1.1	4.6	6.2	6.2
Tompkins	-	-	-	-	-	.3	.6	.9	.9
Ulster	-	.5	-	.5	-	-	-	-	.5
Warren	.3	24.4	17.5	42.2	2.4	-	13.1	15.5	57.7
Washington	-	7.2	4.0	11.2	.4	-	3.0	3.4	14.6
Total	98.6	194.6	74.3	367.5	44.0	7.9	352.0	403.9	771.4

[a] Counties with no production are omitted.

*Less than 50 cords.

Table 14.-Pulpwood production from roundwood in Pennsylvania, by county and species group, 1987

(In thousands of standard cords)

County[a]	Softwood				Hardwood				All species
	Spruce and fir	Hemlock and tamarack	Pine	Total	Aspen and yellow-poplar	Oak and hickory	Other hardwood	Total	
Adams	-	-	0.1	0.1	-	1.4	0.7	2.1	2.2
Allegheny	-	-	-	-	-	.2	.2	.4	.4
Armstrong	-	-	-	-	-	.1	.3	.4	.4
Beaver	-	-	-	-	-	-	.1	.1	.1
Bedford	-	0.5	2.4	2.9	0.5	25.4	17.1	43.0	45.9
Berks	-	-	.3	.3	-	.2	.1	.3	.6
Blair	-	-	.3	.3	*	2.0	1.0	3.0	3.3
Bradford	-	-	1.9	1.9	3.9	4.4	25.6	33.9	35.8
Butler	-	-	-	-	-	.3	3.1	3.4	3.4
Cambria	-	-	.1	.1	-	3.5	1.6	5.1	5.2
Cameron	-	-	-	-	-	5.5	5.2	10.7	10.7
Centre	-	.3	1.8	2.1	.1	2.2	2.7	5.0	7.1
Clarion	-	.2	1.3	1.5	-	1.3	5.0	6.3	7.8
Clearfield	-	1.0	6.4	7.4	*	20.0	15.9	35.9	43.3
Clinton	-	-	1.7	1.7	.7	7.8	6.3	14.8	16.5
Columbia	-	.1	-	.1	.4	3.4	2.5	6.3	6.4
Crawford	-	-	-	-	-	.1	3.1	3.2	3.2
Cumberland	-	-	.6	.6	-	3.0	1.6	4.6	5.2
Dauphin	-	-	18.2	18.2	*	3.3	1.4	4.7	22.9
Elk	-	-	.4	.4	-	1.2	28.7	29.9	30.3
Erie	-	-	-	-	-	-	5.9	5.9	5.9
Fayette	-	-	.1	.1	-	.7	1.2	1.9	2.0
Forest	-	-	.1	.1	-	1.7	33.5	35.2	35.3
Franklin	-	-	.6	.6	-	6.7	3.6	10.3	10.9
Fulton	-	.2	2.7	2.9	.3	5.9	5.0	11.2	14.1
Huntington	-	-	3.1	3.1	*	14.2	7.4	21.6	24.7
Indiana	-	-	.3	.3	-	.1	.8	.9	1.2
Jefferson	-	.3	2.7	3.0	-	.9	13.0	13.9	16.9
Juniata	-	-	.6	.6	-	1.9	1.0	2.9	3.5
Lackawanna	-	*	-	*	*	*	.1	.1	.1

Table 14 (cont'd.)-Pulpwood production from roundwood in Pennsylvania, by county and species group, 1987

(In thousands of standard cords)

County[a]	Softwood				Hardwood				All species
	Spruce and fir	Hemlock and tamarack	Pine	Total	Aspen and yellow-poplar	Oak and hickory	Other hardwood	Total	
Lancaster	-	-	*	*	-	0.5	0.3	0.8	0.8
Lawrence	-	-	-	-	-	*	.2	.2	.2
Lebanon	-	-	0.1	0.1	-	.1	.1	.2	.3
Luzerne	-	-	.5	.5	0.3	6.7	6.0	13.0	13.5
Lycoming	-	-	1.7	1.7	1.0	3.8	9.5	14.3	16.0
McKean	-	-	.3	.3	-	1.0	41.7	42.7	43.0
Mercer	-	-	-	-	-	.1	1.7	1.8	1.8
Mifflin	-	-	.1	.1		.5	.3	.8	.9
Monroe	-	-	.2	.2	*	1.5	.1	1.6	1.8
Montour	-	-	.1	.1	*	.4	.3	.7	.8
Northampton	-	-	.6	.6	*	.4	.2	.6	1.2
Perry	-	-	2.1	2.1	-	1.1	.6	1.7	3.8
Potter	-	-	-	.0	3.5	2.0	34.5	40.0	40.0
Schuylkill	-	-	3.6	3.6	*	14.0	1.8	15.8	19.4
Snyder	-	-	.7	.7	-	2.2	-	2.2	2.9
Somerset	-	-	.7	.7	-	1.4	2.2	3.6	4.3
Sullivan	-	0.2	.7	.9	2.9	5.9	31.8	40.6	41.5
Susquehanna	-	*	-	*	1.9	5.8	20.2	27.9	27.9
Tioga	-	-	.1	.1	4.6	5.4	15.9	25.9	26.0
Union	-	-	.4	.4	.1	.6	.9	1.6	2.0
Venango	-	-	*	*	-	1.6	9.5	11.1	11.1
Warren	-	-	-	-	-	2.1	31.6	33.7	33.7
Wayne	-	-	-	-	.3	1.6	4.7	6.6	6.6
Wyoming	-	*	-	-	2.1	4.5	16.9	23.5	23.5
York	-	-	2.2	2.2	-	2.8	1.5	4.3	6.5
Total	-	2.8	59.8	62.6	22.6	183.4	426.2	632.2	694.8

[a] Counties with no production are omitted.

*Less than 50 cords.

Table 15.-Pulpwood production from roundwood in Delaware, Maryland, and New Jersey, by county and species group, 1987

(In thousands of standard cords)

County[a]	Softwood				Hardwood				
	Spruce and fir	Hemlock and tamarack	Pine	Total	Aspen and yellow-poplar	Oak and hickory	Other hardwood	Total	All species
DELAWARE									
Kent	-	-	0.9	0.9	-	-	-	-	0.9
Sussex	-	-	12.9	12.9	-	0.3	0.1	0.4	13.3
Total	-	-	13.8	13.8	-	.3	.1	.4	14.2
NEW JERSEY									
Atlantic	-	-	0.8	0.8	-	-	-	-	0.8
Sussex	-	*	-	*	-	-	-	-	*
Total	-	*	.8	.8	-	-	-	-	.8
MARYLAND									
Allegany	-	1.0	5.8	6.8	2.6	18.9	18.8	40.3	47.1
Anne Arundel	-	.2	14.7	14.9	-	1.4	.8	2.2	17.1
Baltimore	-	-	2.4	2.4	-	4.1	2.1	6.2	8.6
Calvert	-	-	.3	.3	-	-	*	*	.3
Caroline	-	-	*	*	-	-	-	-	*
Carroll	-	-	*	*	-	*	*	*	*
Charles		.3	11.2	11.5	-	1.0	.8	1.8	13.3
Dorchester	-	-	5.7	5.7	-	-	-	-	5.7
Frederick	-	-	-	-	-	*	*	*	*
Garrett		.3	4.3	4.6	1.6	10.8	14.2	26.6	31.2
Howard	-	-	-	-	-	.1	*	.1	.1
Prince Georges	-	.1	2.2	2.3	-	-	.3	.3	2.6
St. Marys	-	-	7.5	7.5	-	-	.2	.2	7.7
Somerset	-	-	10.6	10.6	-	-	-	-	10.6
Talbot	-	-	*	*	-	-	-	-	*
Washington	-	-	.2	.2	-	*	.3	.3	.5
Wicomico	-	-	25.4	25.4	-	-	-	-	25.4
Worcester	-	-	9.6	9.6	-	-	-	-	9.6
Total	-	1.9	99.9	101.8	4.2	36.3	37.5	78.0	179.8

[a] Counties with no production are omitted.

*Less than 50 cords.

Table 16.-Pulpwood production from roundwood in West Virginia, by county and species group, 1987

(In thousands of standard cords)

County[a]	Softwood				Hardwood				All species
	Spruce and fir	Hemlock and tamarack	Pine	Total	Aspen and yellow-poplar	Oak and hickory	Other hardwood	Total	
Barbour	-	-	-	-	-	-	0.2	0.2	0.2
Berkeley	-	0.7	4.7	5.4	-	0.5	.8	1.3	6.7
Cabell	-	-	.1	.1	*	*	.1	.1	.2
Calhoun	-	-	*	*	-	-	*	*	*
Fayette	-	-	*	*	2.0	8.2	6.0	16.2	16.2
Grant	-	.5	1.3	1.8	1.6	5.0	5.3	11.9	13.7
Greenbrier	-	-	2.1	2.1	5.9	24.2	18.0	48.1	50.2
Hampshire	-	2.5	16.5	19.0	2.1	7.1	7.4	16.6	35.6
Hardy	-	.5	3.0	3.5	1.1	4.3	5.9	11.3	14.8
Jackson	-	.3	3.6	3.9	-	-	*	*	3.9
Kanawaha	-	-	1.3	1.3	1.3	3.4	1.1	5.8	7.1
Mason	-	.5	7.2	7.7	1.6	4.1	.9	6.6	14.3
Mineral	-	.5	3.4	3.9	1.0	5.7	7.5	14.2	18.1
Monroe	-	-	1.7	1.7	.5	2.2	1.6	4.3	6.0
Morgan	-	.3	3.5	3.8	-	1.1	1.7	2.8	6.6
Nicholas	-	-	.1	.1	1.3	5.1	3.7	10.1	10.2
Pendleton	.3	.2	2.5	3.0	1.1	6.4	5.7	13.2	16.2
Pleasants	-	-	*	*	-	3.0	1.6	4.6	4.6
Pocahontas	-	-	.7	.7	.8	3.4	3.1	7.3	8.0
Preston	-	-	.4	.4	-	1.0	3.4	4.4	4.8
Putnam	-	-	5.4	5.4	2.4	4.8	2.5	9.7	15.1
Randolph	.3	-	.3	.6	.4	4.6	5.0	10.0	10.6
Ritchie	-	-	1.3	1.3	-	-	.3	.3	1.6
Roane	-	-	.3	.3	-	-	*	*	.3
Summers	-	-	*	*	*	*	*	*	*
Wirt	-	-	1.3	1.3	-	.7	2.3	3.0	4.3
Wood	-	.2	1.9	2.1	-	.2	.4	.6	2.7
Total	.6	6.2	62.6	69.4	23.1	95.0	84.5	202.6	272.0

[a] Counties with no production are omitted.

*Less than 50 cords.

Table 17.-Bark generated from roundwood pulpwood in the Northeast, by state and species group, 1987

(In million cubic feet)

State[a]	Softwood			Hardwood			All species		
	Used	Unused	Total	Used	Unused	Total	Used	Unused	Total
Kentucky	0.9	-	0.9	4.4	-	4.4	5.3	-	5.3
Maine	21.2	-	21.2	14.0	0.5	14.5	35.2	0.5	35.7
Maryland	1.4	-	1.4	2.1	-	2.1	3.5	-	3.5
New Hampshire	.6	-	.6	3.4	-	3.4	4.0	-	4.0
New York	3.5	0.9	4.4	2.9	.2	3.1	6.4	1.1	7.5
Ohio	.5	-	.5	4.8	-	4.8	5.3	-	5.3
Pennsylvania	1.3	-	1.3	5.4	1.3	6.7	6.7	1.3	8.0
Vermont	-	.1	.1	-	-	-	-	.1	.1
Total	29.4	1.0	30.4	37.0	2.0	39.0	66.4	3.0	69.4

[a] States with no pulpmills are omitted.

Table 18.-Pulpwood removals per acre of timberland in the Northeast, 1987

State	Pulpwood harvest	Timberland	Harvest[b] per acre
	Cords	Acres[a]	Cubic Feet
Connecticut	1,300	1,777,300	0.06
Delaware	14,200	388,200	3.11
Kentucky	245,200	11,901,900	1.75
Maine	3,487,500	17,060,200	17.38
Maryland	179,800	2,424,000	6.30
Massachusetts	10,000	2,952,000	0.29
New Hampshire	397,300	4,812,100	7.02
New Jersey	800	1,857,000	0.04
New York	771,400	15,405,800	4.26
Ohio	372,600	6,917,100	4.58
Pennsylvania	694,800	15,923,700	3.71
Rhode Island	0	371,700	0.00
Vermont	349,800	4,422,100	6.72
West Virginia	272,000	11,483,700	2.01
Total	6,796,700	97,696,800	5.91

[a] Most recent estimates of timberland by USDA, Forest Service.
[b] Conversion factor of 85 cubic feet per cord used.

Widmann, Richard H. 1989. **Pulpwood production in the Northeast--1987.** Resour. Bull. NE-111. Broomall, PA: U.S. Department of Agriculture, Forest Service, Northeastern Forest Experiment Station. 24 p.

This annual report contains 1987 information compiled from a canvass of all pulpmills that use pulpwood produced in the 14 Northeastern States. In 1987, total production reached 9,387,700 cords, an increase of 5 percent since 1986. Roundwood production was 6,796,700 cords whereas pulpwood from residues was 2,591,000 cords. Each of these increased from the previous year, by 3 and 10 percent, respectively. The receipts of pulpwood at mills in the region were 9,894,400 cords.

Keywords: Pulpwood, residue, timber output, harvest

Headquarters of the Northeastern Forest Experiment Station is in Broomall, Pa. Field laboratories are maintained at:

Amherst, Massachusetts, in cooperation with the University of Massachusetts

Berea, Kentucky, in cooperation with Berea College

Burlington, Vermont, in cooperation with the University of Vermont

Delaware, Ohio

Durham, New Hampshire, in cooperation with the University of New Hampshire

Hamden, Connecticut, in cooperation with Yale University

Morgantown, West Virginia, in cooperation with West Virginia University

Orono, Maine, in cooperation with the University of Maine

Parsons, West Virginia

Princeton, West Virginia

Syracuse, New York, in cooperation with the State University of New York, College of Environmental Sciences and Forestry at Syracuse University

University Park, Pennsylvania, in cooperation with The Pennsylvania State University

Warren, Pennsylvania

Persons of any race color, national origin, sex, age, religion, or with any handicapping condition are welcome to use and enjoy all facilities, programs, and services of the USDA. Discrimination in any form is strictly against agency policy, and should be reported to the Secretary of Agriculture, Washington, DC 20250.